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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,687	12/14/2001	Joseph Robert Cleveland	SAMS01-00169	2991
7590		06/01/2006	EXAMINER	
Docket Clerk		LIOU, JONATHAN		
P.O. Drawer 800889		ART UNIT		
Dallas, TX 75380		PAPER NUMBER		

2616

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,687

Applicant(s)

CLEVELAND ET AL.

Examiner

Jonathan Liou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-48 and 54-68 is/are allowed.
- 6) ☒ Claim(s) 37-39 and 49-51 is/are rejected.
- 7) ☒ Claim(s) 40, 41, 52 and 53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's arguments, see page 17 of remark, filed 5/15/2006, with respect to meaning of "capable of" have been fully considered and are persuasive. Since applicant has indicated meaning of "capable of" as that "must be able to receive said at least one...", examiner withdraw the finality as mailed on 03/21/2006. Claims 37-68 are pending.

Claim Objections

2. Claims 37, 42, 49, 54, 61, and 65 are objected to because of the following informalities: Applicant used the term "second higher data rate" is not really clear. It would be clearer if applicant would be more specific. For example, the term "at a second higher data rate" could be written as "at a second data rate, which is higher than said first data rate."

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 37, 38-39, 49, 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Felix et al. (US Pat 5,966,384), in view of Chen et al. (6,101,168.)

Regarding claims 37, 49, Felix et al. teach for use in a wireless network communications system, a method and an apparatus for increasing a data transmission rate in a mobile wireless communication channel during hand off (See Fig. 6, Felix et al.), said method and apparatus comprising the steps of:

sending data packets from a base station to a mobile station on a first channel at a first data rate; (Felix et al. teach sending the data from base station at a first data rate on the first bandwidth as the supplemental channel. See col 4, lines 1-30.)

receiving a negative acknowledgment signal from said mobile station that said mobile station failed to correctly receive at least one data packet; (See col 4, lines 42-54.)

sending at least one replacement data packet to said mobile station on said second channel at a second data rate (While the interruption or timeout occurs, retransmission would utilize the fundamental channel, which would be considered as second channel at a second data rate. See col 4, lines 1-50.)

Felix et al. does not specifically teach retransmitting data on the second higher rate and communicating with a replacement data packet controller capable of receive at least one replacement data packet to replace an error or missing packet. However, Chen teach retransmitted on an additional traffic channel which is independent of the traffic channel used to transmit the new packet (See col 3, lines 28-34, Chen.) Chen further teach sending retransmission with less energy per bit, and this often would result

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with higher data rate (Considering the trade off between operation range and data rate). (See col 3, lines 35-45, Chen.) Therefore, the system taught by Chen also capable of sending retransmission with higher data rate. Chen further teach retransmission because the packet received in error and obviously retransmission is used to replace the error packet (See col 2-3, lines 57-22, Chen.) Since Felix also teach sending the data with two different channel, and Chen teach the link are capable of data transmission at variable data rates (col 2, lines 14-18, Chen.) and retransmission for error correction, it would have been obvious to one who has ordinary skill in the art at the time the invention was made to retransmit the data packet with higher data rate in the second channel with retransmission to replace the error data packet because Chen teach the method to improve throughput rate for overall transmission, including new data and retransmission data (See col 3, lines 20-22.)

Regarding claims 38 and 50, Chen teach retransmission only occur if NACK message is received; thus, if acknowledgement is received, the retransmission would be terminated.

Regarding claims 39 and 51, Chen and Felix both teach channel could fundamental channel or supplemental channel (See Fig. 1, Felix, Fig. 4, Chen.)

Allowable Subject Matter

5. Claims 42-48, 54-68 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: The cited prior art teach from base station to mobile terminal with different channel; however, it fails to teach a first base station is capable of receiving a negative

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acknowledgement signal from said mobile station that said mobile station failed to correctly receive at least one data packet from second base station, combining with rest limitation in the independent claims.

7. Claims 40-41, 52-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Liou whose telephone number is 571-272-8136. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jonathan Liou

5/26/2006


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER